

AMENDMENTS TO THE CLAIMS:

The following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A balloon catheter having a distal end, the balloon catheter comprising:

an elongated catheter shaft having a proximal end, a distal end, a proximal shaft section, and a distal shaft section, an outer tubular member defining an inflation lumen, and an inner tubular member disposed within at least a portion of the outer tubular member inflation lumen and defining at least in part a guidewire receiving lumen extending along at least a portion thereof, the guidewire receiving lumen being in communication with a port at the catheter distal end;

a balloon on the catheter distal shaft section, having an interior in fluid communication with the inflation lumen, proximal and distal ends, a proximal shaft section, and a distal shaft section adhesively secured to the catheter shaft so that a distal portion of the inner tubular member extends through the balloon interior and its distal end extends distal to the balloon distal end, the balloon distal shaft section having an outer surface tapering distally; and

a distal tip member having a proximal-most end adhesively secured to the balloon distal shaft section, and a distal-most end, an outer surface tapering distally to a smaller outer diameter from the proximal-most end of the distal tip member toward the distal-most end of the distal tip member, a lumen in fluid communication with the catheter shaft guidewire receiving lumen, and a proximal portion which extends distally from the proximal-most end along an outer surface of the catheter shaft and which is adhesively secured to the balloon distal shaft section and the outer surface of the catheter shaft.

2. (Canceled)
3. (Currently Amended) The catheter of Claim [[2]] 1 wherein the tip member ~~proximal~~ proximal-most end forms a butt-joint with the balloon distal shaft section.
4. (Cancel)
5. (Canceled)
6. (Currently Amended) The catheter of Claim [[2]] 1 wherein the distal end of the catheter shaft extends distally beyond the balloon distal end in a range from about 1.0 to about 5.0 millimeters.
7. (Previously Presented) The catheter of Claim 6 wherein the distal end of the catheter shaft extends distally beyond the balloon distal end in a range from about 0.5 to about 0.75 millimeters.
8. (Currently Amended) The catheter of Claim 4 wherein the proximal ~~end~~ portion of the tip member extends distally over the catheter shaft in a range from about 0.1 to about 0.5 millimeters.
9. (Currently Amended) The catheter of Claim 8 wherein the proximal ~~end~~ portion of the tip member extends distally over the catheter shaft in a range from about 0.25 to about 0.5 millimeters.
10. (Canceled)
11. (Original) The catheter of Claim 1 wherein the adhesive for forming the adhesive seal between the balloon distal shaft section and the catheter shaft extends along the length of the balloon distal shaft section.

12. (Currently Amended) The catheter of Claim [[2]] 1 wherein the adhesive, for forming the adhesive seal between the catheter shaft and the balloon distal shaft section, and between the catheter shaft section and the tip member, is adapted to be cured.

13. (Currently Amended) A method of forming a balloon catheter, comprising:
providing a catheter assembly including a catheter shaft having proximal and distal ends, an outer tubular member defining an inflation lumen, and an inner tubular member disposed within at least a portion of the outer tubular member inflation lumen and defining at least in part a guidewire receiving lumen extending along at least a portion thereof, and a balloon having proximal and distal ends with an interior and a distal shaft section with an interior surface;

providing a tip member having a proximal-most end and a distal-most end;

positioning a distal portion of the catheter shaft within the interior of the balloon distal shaft section so that its distal end extends distal to the balloon distal end;

providing adhesive along the exterior surface of the catheter shaft extending underneath the balloon distal shaft;

positioning the proximal-most end of the tip member adjacent the balloon distal end, and a proximal portion of the tip member along an outer surface of the catheter shaft;

adhesively bonding at least a portion of the balloon distal shaft section to the catheter shaft; and

adhesively bonding at least [[a]] the proximal portion of the tip member to the outer surface of the catheter shaft and at least ~~a portion~~ the proximal-most end of the tip member to the balloon distal shaft section, to thereby form a distal tip portion of the catheter having an outer surface tapering distally along the adhesively bonded portion of the balloon distal shaft section and the distal tip member, with the tip member having an outer surface tapering distally from the proximal-most end of the tip member toward the distal-most end of the tip member, and having the proximal portion of the tip member

extending distally from the proximal-most end along the outer surface of the catheter shaft.

14. (original) The method of Claim 13 further including curing the adhesive.

15. (previously presented) A balloon catheter having a distal end, the balloon catheter comprising:

an elongated catheter shaft having a proximal end, a distal end, a proximal shaft section, a distal shaft section, an inflation lumen, and a guidewire receiving lumen extending along at least a portion thereof, the guidewire receiving lumen being in communication with a port at the catheter distal end;

a balloon on the catheter distal shaft section, having an interior in fluid communication with the inflation lumen, proximal and distal ends, a proximal shaft section, and a distal shaft section adhesively secured to the catheter shaft, the balloon distal shaft section having an outer surface tapering distally; and

a distal tip member having proximal and distal ends, an outer surface tapering distally to a smaller outer diameter from the proximal end of the distal tip member toward the distal end of the distal tip member, a lumen in fluid communication with the catheter shaft guidewire receiving lumen, and a proximal portion adhesively secured to the balloon distal shaft section and the catheter shaft, wherein the distally tapering outer surfaces of the balloon distal shaft section and the distal tip member are aligned and taper at the same angle.